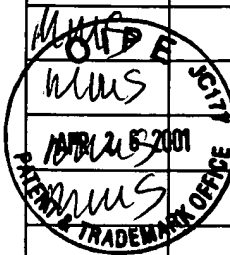


File copy

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	09/716,320
				Filing Date	21 November 2000
				First Named Inventor	Esther H. CHANG et al.
				Group Art Unit	1635
				Examiner Name	Schmidt
Sheet	1	of	5	Attorney Docket Number	2444-109

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
		5,576,208		Monia et al.	11/19/1996
		5,599,704		Thompson et al.	02/04/1997
		5,734,039		Calabretta et al.	03/31/1998
		6,027,892		Chang et al.	02/22/2000

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee of Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number	Kind Code (if known)			
MUS		PCT	WO 95/32987		Isis Pharmaceuticals, Inc.	12/07/1995	
MUS		PCT	WO 97/10007		Genetic Therapy, Inc. et al.	03/20/1997	
MUS		PCT	WO 97/28817		Pi-Wan CHENG	08/14/1997	
MUS		PCT	WO 94/15645		Texas Biotechnology Corp.	07/21/1994	

Examiner Signature	Schmidt	Date Considered	4/30/02
-----------------------	---------	--------------------	---------


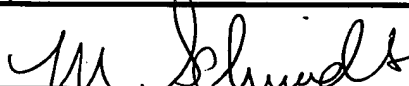
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code.

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.


INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	09/716,320
				Filing Date	21 November 2000
				First Named Inventor	Esther H. CHANG et al.
				Group Art Unit	1635
				Examiner Name	Schmidt
Sheet	2	of	5	Attorney Docket Number	2444-109

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶	
		AOKI, K. et al. "Liposome-mediated in Vivo Gene Transfer of Antisense K-ras Construct Inhibits Pancreatic Tumor Dissemination in the Murine Peritoneal Cavity", <i>Cancer Research</i> , Sept. 1, 1995; 55:3810-3816		
		BERTRAM, J. et al. "Reduction of erbB2 gene product in mamma carcinoma cell lines by erbB2 mRNA-specific and tyrosine kinase consensus phosphorothioate antisense oligonucleotides", <i>Biochem. Biophys. Res. Commun.</i> , Apr. 15, 1994; 200(1):661-667		
MUS		BRADLEY, M.O. et al. "Reversal of Transformed Phenotypes by Antisense fos", <i>Annals New York Academy of Sciences</i> , (1992); pp. 124-135		
MUS		BRANCH, A.D. "A good antisense molecule is hard to find", <i>TIBS</i> , Feb. 1998; 23:45-50		
MUS		CHENG, P.-W. "Receptor Ligand-Facilitated Gene Transfer: Enhancement of Liposome-Mediated Gene Transfer and Expression by Transferrin", <i>Human Gene Therapy</i> , Feb. 10, 1996; 7:275-282		
MUS		CROOKE, S.T. "Basic Principles of Antisense Therapeutics", Chapter 1; <i>Antisense Research and Application</i> , ed. Stanley T. Crooke, Springer-Verlag, New York (July 1998) pp. 1-50 plus 2 cover pages		
MUS		DAUM, G. et al. "The ins and outs of Raf kinases", <i>TIBS</i> , Nov. 1994; 19:474-479		
MUS		DEAN, N.M. et al. "Antisense oligonucleotides as inhibitors of signal transduction: development from research tools to therapeutic agents", <i>Biochem. Soc. Trans.</i> , 1996; 24:623-629		
MUS		DZAU, V.J. et al. "Fusigenic viral liposome for gene therapy in cardiovascular diseases", <i>Proc. Natl. Acad. Sci. USA</i> , Oct. 1996; 93:11421-11425		
MUS		FEERO, W.G. et al. "Selection and use of ligands for receptor-mediated gene delivery to myogenic cells", <i>Gene Therapy</i> , 1997; 4:664-674		
MUS		FILION, M.C. et al. "Toxicity and immunomodulatory activity of liposomal vectors formulated with cationic lipids toward immune effector cells", <i>Biochimica et Biophysica Acta</i> , 1997; 1329:345-356		
Examiner Signature			Date Considered	4/30/02

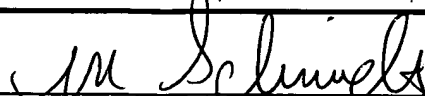
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	09/716,320
				Filing Date	21 November 2000
				First Named Inventor	Esther H. CHANG et al.
				Group Art Unit	11e35
				Examiner Name	Schmidt
Sheet	3	of	5	Attorney Docket Number 2444-109	
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ⁶
MMS		FLANAGAN, W.M. et al. "Cellular penetration and antisense activity by a phenoxazine-substituted heptanucleotide", <i>Nature Biotechnology</i> , Jan. 1999; 17:48-52			
MMS		GEWIRTZ, A.M. et al. "Facilitating oligonucleotide delivery: Helping antisense deliver on its promise", <i>Proc. Natl. Acad. Sci. USA</i> , Apr. 1996; 93:3161-3163			
MMS		GRIMALDI, S. et al. "Attempts to use liposomes and RBC ghosts as vectors in drug and antisense therapy of virus infection", <i>Res. Virol.</i> , 1997; 148:177-180			
MMS		GURA, T. "Systems for Identifying New Drugs are Often Faulty", <i>Science</i> , Nov. 7, 1997; 278:1041-1042			
MMS		HE, Y. et al. "Growth Inhibition of Human Papillomavirus 16 DNA-positive Mouse Tumor by Antisense RNA Transcribed from U6 Promoter", <i>Cancer Res.</i> , Sept. 15, 1997; 57:3993-3999			
MMS		KASID, U. et al. "Effect of Antisense c-raf-1 on Tumorigenicity and Radiation Sensitivity of a Human Squamous Carcinoma", <i>Science</i> , March 10, 1989; 243:1354-1356			
MMS		KASID, U. et al. "The raf Oncogene is Associated with a Radiation-Resistant Human Laryngeal Cancer", <i>Science</i> , Aug. 28, 1987; 237:1039-1041			
MMS		KIZAKA-KONDOH, S. et al. "Raf-1 Protein Kinase is an Integral Component of the Oncogenic Signal Cascade Shared by Epidermal Growth Factor and Platelet-Derived Growth Factor", <i>Molecular and Cellular Biology</i> , Nov. 1992; 12(11):5078-5086			
MMS		LAPPALAINEN, K. et al. "Cationic liposomes mediated delivery of antisense oligonucleotides targeted to HPV 16 E7 mRNA in CaSki cells", <i>Antiviral Research</i> , 1994; 23:119-130			
MMS		LAVIGNE, C. et al. "Enhanced Antisense Inhibition of Human Immunodeficiency Virus Type 1 in Cell Cultures by DLS Delivery System", <i>Biochem. Biophys. Res. Comm.</i> , 1997; 237:566-571			
MMS		LEDWITH, B.J. et al. "Antisense-fos RNA Causes Partial Reversion of the Transformed Phenotypes Induced by the c-Ha-ras Oncogene", <i>Molecular and Cellular Biology</i> , Apr. 1990; 10(4):1545-1555			
MMS		LEE, R.J. et al. "Folate-targeted, Anionic Liposome-entrapped Polylysine-condensed DNA for Tumor Cell-specific Gene Transfer", <i>J. Biol. Chem.</i> , Apr. 5, 1996; 271(14):8481-8487			
Examiner Signature				Date Considered	7/30/02



*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	09/716,320
				Filing Date	21 November 2000
				First Named Inventor	Esther H. CHANG et al.
				Group Art Unit	1635
				Examiner Name	Schmidt
Sheet	4	of	5	Attorney Docket Number	2444-109
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ⁶
MMS		MAHER, L.J. et al. "Specific Hybridization Arrest of Dihydrofolate Reductase mRNA in Vitro Using Anti-sense RNA or Anti-sense Oligonucleotides", <i>Archives of Biochemistry and Biophysics</i> , Feb. 15, 1987; 253(1):214-220			
MMS		MORISHITA, R. et al. "Molecular Delivery System for Antisense Oligonucleotides: Enhanced Effectiveness of Antisense Oligonucleotides by HVJ-liposome Mediated Transfer", <i>J. Cardiovasc. Pharmacol. Therapeut.</i> , 1996; 2(3):213-222			
MMS		PLANK, C. et al. "Activation of the Complement System by Synthetic DNA Complexes: A Potential Barrier for Intravenous Gene Delivery", <i>Human Gene Therapy</i> , Aug. 1, 1996; 7:1437-1446			
MMS		RENNEISEN, K. et al. "Inhibition of Expression of Human Immunodeficiency Virus-1 in Vitro by Antibody-targeted Liposomes Containing Antisense RNA to the env Region", <i>J. Biological Chemistry</i> , Sept. 25, 1990; 265(27):16337-16342			
MMS		ROJANASAKUL, Y. "Antisense oligonucleotide therapeutics: drug delivery and targeting", <i>Advanced Drug Delivery Reviews</i> , 1996; 18:115-131			
MMS		ROPERT, C. et al. "Oligonucleotides Encapsulated in pH Sensitive Liposomes are Efficient Toward Friend Retrovirus", <i>Biochem. Biophys. Res. Commun.</i> , Mar. 16, 1992; 183(2):879-885			
MMS		SEPP-LORENZINO, L. et al. "Signal transduction pathways induced by heregulin in MDA-MB-453 breast cancer cells", <i>Oncogene</i> , 1996; 12:1679-1687			
MMS		SETH, P. et al. "Adenovirus-mediated Gene Transfer to Human Breast Tumor Cells: An Approach for Cancer Gene Therapy and Bone Marrow Purging", <i>Cancer Research</i> , Mar. 15, 1996; 56:1346-1351			
MMS		SIMOES, S. et al. "Enhancement of Cationic Liposome-mediated Gene Delivery by Transferrin and Fusogenic Peptides", <i>Proceedings of the 24th International Symposium on Controlled Release of Bioactive Materials</i> , June 15-19, 1997; 24:659-660			
MMS		SOLDATENKOV, V.A. et al. "Inhibition of Raf-1 Protein Kinase by Antisense Phosphorothioate Oligodeoxyribonucleotide is Associated with Sensitization of Human Laryngeal Squamous Carcinoma Cells to Gamma Radiation", <i>The Cancer Journal from Scientific American</i> , Jan./Feb. 1997; 3(1):13-20			
Examiner Signature				Date Considered	4/20/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	09/716,320
				Filing Date	21 November 2000
				First Named Inventor	Esther H. CHANG et al.
				Group Art Unit	1635
				Examiner Name	Schmidt
Sheet	5	of	5	Attorney Docket Number	2444-109
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ⁶
		STEIN, C.A. "Hybridization prediction gets to first base", <i>Nature Biotechnology</i> , Aug. 1999; 17:751-752			
		SUY, S. et al. "Association of Grb2 with Sos and Ras with Raf-1 upon gamma irradiation of breast cancer cells", <i>Oncogene</i> , 1997; 15:53-61			
		TSENG, B.Y. et al. "Antisense oligonucleotide technology in the development of cancer therapeutics", <i>Cancer Gene Therapy</i> , 1994; 1(1):65-70			
MMS		VAUGHN, J.P. et al. "Inhibition of the erbB-2 tyrosine kinase receptor in breast cancer cells by phosphoromonothioate and phosphorodithioate antisense oligonucleotides", <i>Nucleic Acids Research</i> , 1996; 24(22):4558-4564			
MMS		WAGNER, E. et al. "Influenza virus hemagglutinin HA-2 N-terminal fusogenic peptides augment gene transfer by transferrin-polylysine-DNA complexes: Toward a synthetic virus-like gene-transfer vehicle", <i>Proc. Natl. Acad. Sci. USA</i> , Sept. 1992; 89:7934-7938			
MMS		WANG, S. et al. "Delivery of antisense oligodeoxyribonucleotides against the human epidermal growth factor receptor into cultured KB cells with liposomes conjugated to folate via polyethylene glycol", <i>Proc. Natl. Acad. Sci. USA</i> , 1995; 92:3318-3322			
MMS		Wang, Y. et al. "Prolonged Inhibition by X-Rays of DNA Synthesis in Cells Obtained by Transformation of Primary Rat Embryo Fibroblasts with Oncogenes H-ras and v-myc", <i>Cancer Research</i> , 1992; 52:508-514			
MMS		XU, L. et al. "Transferrin-Liposome-Mediated p53 Sensitization of Squamous Cell Carcinoma of the Head and Neck to Radiation in Vitro", <i>Human Gene Therapy</i> , Mar. 1, 1997; 8:467-475			
MMS		XU, M. et al. "Parenteral Gene Therapy with p53 Inhibits Human Breast Tumors In Vivo Through a Bystander Mechanism Without Evidence of Toxicity", <i>Human Gene Therapy</i> , Jan. 20, 1997; 8:177-185			
MMS		ZELPHATI, O. et al. "Synthesis and anti-HIV activity of thiocholesteryl-coupled phosphodiester antisense oligonucleotides incorporated into immunoliposomes", <i>Antiviral Research</i> , 1994; 25:13-25			
MMS		ZELPHATI, O. et al. "Antisense oligonucleotides in solution or encapsulated in immunoliposomes inhibit replication of HIV-1 by several different mechanisms", <i>Nucleic Acids Research</i> , 1994; 22(20):4307-4314			
Examiner Signature				Date Considered	4/30/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.